

# LOOK AGAIN



## The Potential — and Reality — of Blockchain

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One of the hottest topics in financial services these days is blockchain. First introduced as the technology behind the currency Bitcoin, its value and potential are now recognized much more broadly.

While not everyone fully understands it, more and more people are talking about it. Evangelizers say it will cut costs, improve security, manage risk, improve customer service, and help grow business. Who wouldn't be interested? Even U.S. Congress is taking notice. This March, they created a Congressional Blockchain Caucus to help them understand the technology and its potential applications.

Essentially, blockchain is a distributed ledger or database, designed to be an indisputable record of transactions. Because identical copies of transactions are kept across multiple computers, it can't be controlled by any one participant. And because all necessary parties have access to the blockchain, it doesn't require an intermediary for validation or approval.

Data is exchanged, verified, and stored in "blocks," which each party validates before adding the block to the chain. Because this chain of sequenced, timestamped blocks is distributed, security is far more robust than traditional systems. Unauthorized people seeking to access or change data would need to hack into the entire block, as well as all the blocks connected

to it, across all systems holding it. And all activity would be visible to every participant in the transaction, making illegal tampering difficult, to say the least. Nothing may be completely hack-proof, but this is certainly a quantum leap in collective security.

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It sounds wonderful, right? It may be, although we are a long way from realizing all of this potential. An article in the *Harvard Business Review* likened blockchain technology development to that of email and the internet. The technology these capabilities were built upon changed the way businesses and people communicate — but it didn't happen overnight. It took almost 30 years to fully realize the potential. In the beginning, there were multiple, competing internet languages. It wasn't until HTML became the standard that development really accelerated. Blockchain is arguably starting in a similar place.

That hasn't stopped the financial services industry from exploring the technology — nor should it. According to a report by the World Economic Forum, 80 percent of banks are predicted to have blockchain initiatives in 2017. Moreover, more than \$1 billion has been invested and more than 2,500 patents have been filed related to blockchain in the last three years.<sup>1</sup>

A few insurance companies have also been exploring the technology with low-risk, internal use cases. For example, one company has worked

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with a blockchain software developer and a blockchain platform provider to develop applications for employee rewards and recognition. They are also looking at improving the onboarding process for new customers.

One of the potential game-changers of blockchain is the concept of “smart contracts.” These digital contracts exist on the blockchain and define a set of rules governing a transaction or relationship. As with other blockchain transactions, the parties involved could create and execute the contract without involving an intermediary — saving time and cost. Unlike traditional contracts, a smart contract can conceivably access all the data needed to validate and execute itself automatically.

One company has already done this with a smart contract for transacting natural catastrophe swaps. Consider the potential savings if, instead of a life insurance company having a claims department process paperwork and file a claim, the filing of the death certificate triggered the transfer of funds from the company to the beneficiary. Not all insurance contracts may be amenable to this treatment, and there are a lot of hurdles to leap over to get to this future, but it is worth consideration.

The true power of blockchain lies in collaboration — being able to transact business more quickly, effectively, and securely. There is a collaborative effort between insurers and reinsurers already: the Blockchain Insurance Industry Initiative (B3i). Here, 15 companies

(to date) are exploring how blockchain can improve data sharing between insurance and reinsurance companies. Ideally, they will be able to improve efficiency, transparency, and customer service. The initiative started with five participants, but has grown quickly in recent months, suggesting more companies are recognizing the potential.

Annuity carriers and life insurers can also reap benefits. The potential to improve operational efficiency, boost security, and deliver a better customer experience are compelling reasons to look at use cases. Distributed ledger technology can be applied to new policy applications, policy changes, policy payments, product profiles, product illustrations, compliance, and claims.

Typically, it's difficult to know the best time to adopt a new technology. If you start too soon, time and effort could be wasted on a technology too new to provide solutions. On the other hand, starting too late can put you at a competitive disadvantage. Banks have been leading the way on blockchain, and insurers have been slower to explore it. As more companies invest in blockchain initiatives, there will be greater opportunity to collaborate and develop industry standards, which will move

the technology forward. Early adopters have the ability to help determine industry standards, but, ultimately, everyone could benefit from the gains. 🌐

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<sup>1</sup> *The Future of Financial Infrastructure: An Ambitious Look at How Blockchain Can Help Reshape Financial Services*, World Economic Forum/Deloitte, August 2016.